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09/677,257	10/02/2000	John F. Catalano	B08369-00002	3890

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EXAMINER

CHAWAN, SHEELA C

ART UNIT PAPER NUMBER

2625

DATE MAILED: 12/03/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/677,257

Applicant(s)

CATALANO ET AL.

Examiner

Sheela C Chawan

Art Unit

2526

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 16-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15, 51 and 52 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 6. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-15, 51-52, are drawn to a over all process of verifying or biometric device and classified in class 382 , and subclass 115.
- II. Claims 16-29, 48- 49, are drawn to extracting of the minutia and, classified in class 382 and subclass 125.
- III. Claims 30- 47 and 50, are drawn to a template use and creation and, classified in class 382 and subclass 209.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II and III, are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as A over all process of verifying or biometric device and , invention II has separate utility such as A extracting of the minutia and , invention III has separate utility such as A template use and creation and .See MPEP ' 806.05(d).

2. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II , restriction for examination purposes as indicated is proper.

3. A telephone call was made to Mr. Robert J. Hess on 11/12/02 to request an oral election to the above restriction requirement, Mr. Hess has elected group 1, without traverse and the claims are 1- 15, 51 and 52 .

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

#### **DETAILED ACTION**

##### ***Drawings***

2. Drawings filed on this 10/02/00 have been approved by the Examiner .

##### **Election/Restriction**

3. Claims 16-50 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention , there being no allowable generic or linking claim . Election was made without traverse .

##### ***Claim Rejections - 35 U.S.C. § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103 and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-11, 13-15 and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott et al. (US.6,484,260) in view of Cambier et al (US.6,532,298B1).

As per claims 1 and 51, Scott discloses a biometric verification device for providing secure access to a unit connected to the device, the device comprising:

A biometric sensor ( fig 3, item 11 a biometric sensor ) capable of sensing a biometric trait of a user that is unique to said user and providing a first signal containing information representing said biometric trait ( fig 3, item 11, biometric sensor is capable of sensing biometric trait of a user that is unique to the user which is provides a biometric signal, column 1, lines 46- 51) ; and

a processing unit ( fig 3, item 16 ) connected to said biometric sensor so as to receive said first signal, said processing unit being adapted to compare said information with biometric data stored in said processing unit representing a biometric trait of an enrolled person ( fig 3, item 16, processing unit includes processing circuit, fig 3, item 18 which process biometric signal and compare the biometric signal with stored biometric data of the biometric trait of an enrolled person that is indicative of the identity of the enrolled person column 1, lines 46- 65) , and provide a verification signal indicating whether or not said information corresponds sufficient with said biometric

Art Unit: 2526

data to verify said user is said enrolled person ( the processor provides a verification signal only if the biometric signal corresponds sufficiently to the biometric data to verify that the user is the enrolled person , column 1, lines 46- 61 ) , wherein said processing unit completes said comparison and generates said verification signal within 20 seconds ( verification of the fingerprint signal is compared to the stored fingerprint only if the two are similar , the user's identity is verified to be the enrolled person and take about 1 second or less , column 10, lines 14- 29).

Regarding claims 1 and 51 Scott discloses a personal identification system employing a biometric sensor for allowing access to secure facilities, Scott is silent about specifics details of biometric sensor senses said biometric trait using no more than 1 W of peak power. However, Cambier discloses portable authentication device and method using iris patterns. The imager of fig1, item 100 is a compact handheld imaging apparatus which is capable of capturing high-quality iris images , the imager 100 and an illuminator 130 is powered by a standard DC supply such as a battery or other suitable source .The illuminator 130 is a miniature quartz halogen or krypton gas bulb operating at approximately 1 watt of power ( fig 1, column 4, lines 22- 29, the power consumption of light is not absolute value of 1W . The absolute value of 1 Watt is the actual power consumption is the manufacturing variation ), as shown by Cambier the use of biometric sensor senses said biometric trait using no more than 1 W of power, because power is the main part of the sensor for sensing power consumption in the circuit and also the illuminator which illuminates the eye and the iris thereby forming

a magnified virtual image which the user can see through the eye being imaged ( column 5, lines 28- 34 ) .

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to incorporate the teaching of a device in which biometric sensor senses said biometric trait using no more than 1 W of power as taught by Cambier 's into the system of Scott , because one with ordinary skill in the art would realize that power is the main part of the sensor for sensing power consumption in the circuit and also the illuminator which illuminates the eye and the iris thereby forming a magnified virtual image which the user can see through the eye being imaged as suggested by Cambier ( column 5, lines 28- 34 ) .

Claim 51 is representative of claim 1.

As per claim 2, Scott discloses a device wherein said biometric trait is a fingerprint ( column 10, lines 14- 29 ) .

As per claim 3, Scott discloses a device wherein said biometric trait is an iris pattern from an eye ( column 1, 18- 31).

As per claim 4, Scott discloses a personal identification system employing a biometric sensor for allowing access to secure facilities, Scott is silent about processing unit completes said comparison and generates said verification signal using no more than 400 mV of peak power . However, Cambier discloses a device wherein said processing unit completes said comparison and generates said verification signal using no more than 400 mV of peak power ( column 4, lines 22- 29, 400 mV is less than 1W which meets the claim limitation ).

As per claim 5, Scott discloses a device wherein said processing unit completes said comparison and generates said verification signal within 7 seconds of when said biometric sensor senses said biometric trait ( verification of the fingerprint signal is compared to the stored fingerprint only if the two are similar , the user's identity is verified to be the enrolled person and take about 1 second or less , column 9, lines 54-64, column 10, lines 14- 29).

As per claim 6, Scott discloses a device wherein said processing unit stores said biometric data representing a biometric trait of an enrolled person using no more than 1 K bytes of data ( Finger scan Biometrics Engine includes algorithms for capturing and processing fingerprint image signal and then converting 140 Kbytes to approximately 120 bytes , column 9, lines 8- 15, 120 bytes is less then 1K which meets the claim limitation ).

As per claim 7, Scott discloses a device wherein said processing unit stores said biometric data representing a biometric trait of an enrolled person using no more than 256 bytes of data ( column 9, lines 8- 12 , 120 bytes of data is less then 256 bytes of data which meets the claimed limitation).

As per claim 8, Scott discloses a device further including one or more batteries that comprise the sole source of power for the device ( column 8, lines 26- 29).

As per claim 9, Scott discloses a device wherein said processing unit includes non-volatile memory for storing said biometric data representing said biometric trait ( column 9, lines 1-7).

As per claim 10, Scott discloses a device including a wireless interlace for connecting the device with the unit ( column 1, lines 62- 65, column 2, lines 51- 53).

As per claim 11, Scott discloses a device including a wired interface for connecting the device with the unit ( column 8, lines 30-38, column 13, lines 1 - 5 ) .

As per claim 13, Scott discloses a device which including an external unit connected to said processing unit ( column 6, lines 47- 49 ), said external unit being operable independently of said sensor and processing unit upon receipt of said verification signal indicating said user is said enrolled person ( column 6, lines 14- 28 ).

As per claim 14, Scott discloses a device wherein said external unit is remote from said sensor and processing unit ( column 4, lines 43- 60).

As per claim 15, Scott discloses a device wherein said eternal unit is physically proximate sensor and processing unit ( column 6, lines 14- 28, 47- 49 ).

As per claim 52, discloses a device wherein said processing unit modifies said image to account for variation in said output signal from an absolute value arising from at least one of (a) manufacturing variations and (b) expansion and contraction arising from changes in pressure and environment factors ( column 5, lines 28- 34, the power consumption of light is not absolute value of 1W . The absolute value of 1 Watt is the actual power consumption is the manufacturing variation .

5. Claim 12 is rejected under 35 U.S.C.103(a) as being unpatentable over Scott et al. (US.6,484,260) in view of Cambier et al (US.6,532,298B1).

Regarding claim 12 neither Scott nor Cambier discloses a processing unit performs said comparison with a false acceptance rate of less than about 0.5% and a

Art Unit: 2526

false rejection rate of less than about 5%. The examiner takes an official notice that identifying the value for false acceptance rate and false rejection rates are designer choice routing implemented in a statistically decision making . These values are normally obtained from an experimented results.

***Other prior art cited***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brownrigg et al, (US. 5,099,131) discloses acquisition and testing of latent fingerprint using up conversion.

Schmitt et al, ( US.5,930,225) discloses access control system including fingerprint sensor enrollment and associated method.

Diehl et al, (US.6,317,544 B1) discloses distributed mobile biometric identification system with a centralized server and mobile workstations.

Lee et al., (US.6,411,728 B1) discloses association of finger pores and macro features for identification of individuals.


Daugman discloses biometric personal identification system based on iris analysis.


**Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is 703-305-4876. The examiner can normally be reached on Monday through Thursday 7.30 a.m. to 6.00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (703) 308 - 5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

  
Sheela Chawan  
Patent Examiner  
Group Art Unit 2625  
Nov 20, 2003

  
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